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1. A method of treating a subject having a disorder characterized by unwanted cell proliferation, the method comprises increasing TSP-2 activity.

- 2. The method of claim 1, wherein TSP-2 activity is increased by administering an agent which increases TSP-2 activity.
- 3. The method of claim 2, wherein the agent is a TSP-2 polypeptide, or a biologically active fragment or analog thereof.
- 4. The method of claim 3, wherein the fragment is a synthetic TSP-2 derived peptide.
- 5. The method of claim 3, wherein the analog is a retro-inverso peptide of TSP-2.
- 6. The method of claim 4, wherein the peptide comprises the sequence of SEQ ID
- 7. The method of claim 6, wherein the peptide has the sequence of SEQ ID NO: \_\_.
- 8. The method of claim 2, wherein the agent is a nucleic acid encoding a TSP-2 polypeptide, or a biologically active fragment or analog thereof.
- 9. The method of claim 2, wherein the agent is an agonist of TSP-2.
- 10. The method of claim 1, wherein TSP-2 activity is increased by increasing endogenous TSP-2 activity.

- 11. The method of claim 10, wherein TSP-2 activity is increased by one of more of: increasing the level of expression of the gene, increasing the stability of the TSP-2 mRNA, increasing the translation of TSP-2 mRNA, and increasing the stability of the TSP-2 protein.
- 12. The method of claim 11, wherein transcription of the TSP-2 gene is increased by altering the regulatory sequences of the endogenous TSP-2 gene.
- 13. The method of claim 1, wherein the disorder is characterized by pre-cancerous, cancerous or neoplastic cells, or the presence of a tumour.
- 14. The method of claim 13, wherein the disorder affects an epithelial tissue.
- 15. The method of claim 1, wherein the disorder is characterized by unwanted skin cell proliferation.
- 16. The method of claim 15, wherein the disorder is a squamous cell carcinoma of the skin or a malignant melanoma.
- 17. The method of claim 1/2, wherein the disorder is characterized by unwanted prostate cell proliferation.
- 18. The method of claim 1, wherein the disorder is characterized by benign unwanted skin proliferation in the skin.
- 19. The method of claim 18, wherein the disorder is psoriasis or papilloma formation.
- 20. The method of claim 1, further comprising increasing TSP-1 activity.
  - The method of claim 1 or claim 20, further comprising inhibiting VEGF activity.



22. The method of claim 1, further comprising administering a chemotherapeutic agent.

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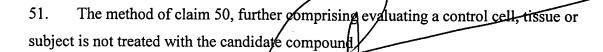
- 23. The method of claim 22, wherein the chemotherapeutic agent is taxol or carboplatin.
- 24. The method of claim 1, wherein a cell that has been genetically modified to express a TSP-2 protein, or a fragment or an analog thereof is introduced into the subject.
- 25. The method of claim 24, wherein the cell is selected from the group consisting of a fibroblast, a keratinocyte, an epithelial cell, an endothelial cell, a glial cell, a neural cell, a lymphocyte, a bone marrow cell, and a muscle cell.
- 26. A method of treating a subject having an unwanted skin condition comprising modulating TSP-2 activity to thereby treat the disorder.
- 27. The method of claim 26, wherein the unwanted skin condition is a condition that affects the structure of the skin.
- 28. The method of claim 27, wherein the condition can be caused by a genetic factor.
- 29. The method of claim 28, wherein the genetic factor is epidermolysis.
- 30. The method of claim 29, wherein the condition is caused by an environmental factor.
- 31. The method of claim 30, wherein the environmental factor is ultraviolet radiation.
- 32. The method of claim 26, wherein TSP-2 activity is increased.

- 33. The method of claim 32, wherein TSP-2 activity is increased by administering an agent which increases a TSP-2 activity.
- 34. The method of claim 33, wherein the agent which increases a TSP-2 activity is selected from the group consisting of: a TSP-2 polypeptide or a biologically active fragment or analog thereof, a nucleic acid encoding a TSP-2 polypeptide or a biologically active fragment or analog thereof, and an agonist of TSP-2.
- 35. The method of claim 32, wherein the level of TSP-2 can be increased by increasing the endogenous TSP-2 activity.
- 36. The method of claim 26, wherein TSP-2 activity is decreased.
- 37. The method of claim 36, wherein TSP-2 activity is decreased by administering an agent which decreases TSP-2 activity.
- 38. The method of claim 37, wherein the agent which decreases a TSP-2 activity is selected from the group consisting of: a TSP-2 nucleic acid molecule that can bind to cellular TSP-2 mRNA and inhibit expression of the protein, an antibody that specifically binds to a TSP-2 protein, a dominant negative TSP-2 protein or fragment thereof and an agent which decreases TSP-2 nucleic acid expression.
- 39. The method of claim 36, wherein the level of TSP-2 can be decreased by decreasing the endogenous TSP-2 activity.
- 40. The method of claim 32, wherein the unwanted condition is aged skin.
- 41 / The method of claim 32, wherein the unwanted condition is psoriasis.
- 42/. The method of claim 32, wherein the unwanted condition is rosecea dermatosis.

- 43. The method of claim 32, wherein the unwanted condition is skin damage caused by photoradiation.
- 44. A method of evaluating if a subject is at risk for unwanted proliferation comprising: evaluating the presence of a TSP-2 nucleic acid or protein, wherein a decrease in TSP-2 activity is indicative of the subject being at risk.
- 45. The method of claim 44, wherein the subject is evaluated for a risk of squamous cell carcinoma.
- 46. The method of claim 44, wherein the subject is evaluated for a risk of melanoma.
- 47. The method of claim 44, wherein the subject/is evaluated for a risk of prostate cancer.
- 48. The method of claim 44, wherein the presence of TSP-2 is evaluated by contacting a biological sample with a compound of an agent capable of detecting TSP-2 protein or TSP-2 nucleic acid, such that the presence of TSP-2 nucleic acid or protein is detected in the biological sample.
- 49. The method of claim 48, wherein the compound or agent is a nucleic acid probe capable of hybridizing to TSP-2 mRNA or an antibody capable of binding to TSP-2 protein.
- 50. A method of identifying a compound which can be used to treat a disorder characterized by unwanted proliferation, comprising:

providing a cell, a tissue, or a subject;

treating the cell or the tissue, or the subject with a candidate compound; and determining the level of TSP-2 nucleic acid or TSP-2 protein, wherein the ability of the compound to increase TSP-2 nucleic acid or TSP-2 protein is indicative of a compound which can be used to treat the disorder.



52. The method of claim 50, wherein the compound is a fragment or analog of TSP-2.